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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/776,940

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Toerless Eckert

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EXAMINER

POLLACK, MELVIN H

ART UNIT

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2145

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/776,940	Applicant(s) ECKERT, TOERLESS	
	Examiner MELVIN H. POLLACK	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attached office action</u> . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 03 December 2008 have been fully considered but they are not persuasive. An analysis of each argument is provided below.
2. Examiner withdraws the 112 rejection in light of the amendment.
3. Examiner is not required to map the claims, but has done so here in order to better clarify the position of the office in responding to arguments.
4. In response to applicant's argument that the examiner's conclusion that SSM and ASM are incompatible request types is based upon improper hindsight reasoning (P. 9, Para. 1), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).
5. Applicant argues that Yoneda does not expressly disclose incompatible types, and more specifically does not expressly disclose that SSM and ASM are incompatible. Not only are these the required incompatible types as defined by claim 2 in light of the specification, but they are incompatible by definition. "SSM does not require IP multicast address assignment which ASM requires (Para. 31)." Therefore, the ability to handle incompatible types is inherent in the functionality of ASM and SSM message handling, and this inherency is further known by one of ordinary skill in the art.

6. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the L2 switch is a "more typical" switch as opposed to an L2 bridge between networks (P. 10, Para. 3)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

7. Applicant argues that Bou-Diab's L2 switch is not interposed between a group of receivers and a router. Fig. 3 and related description (Paras. 40-47) shows that the switch is indeed interposed between a receiver and a router, even assuming that the coupling means a direct connection. This is as one would expect in a network bridge.

8. In the alternate, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In further response to applicant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Therefore, even if the Bou-Diab switch wasn't directly coupled between a router and a receiver, it is sufficient to show that the Yoneda reference is.

9. Applicant argues that neither side sends requests of different types to said router from distinct addresses (P. 10, Para 4), but only concentrates on Bou-Diab's segregation method. Applicant claims that Bou-Diab segregates each request "regardless of compatibility and type," but fails to explain just what non-compatibility non-type criterion Bou-Diab uses in their interpretation of the art. Yoneda sorts request by type and by address (see also Paras. 39-51), and this all that needs to be shown at this time.

10. In response to applicant's argument that Bou-Diab is nonanalogous art (P. 10, Para 5), it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, it is irrelevant whether the art is filed in different subclasses (both art items are currently filed in the same class - 370), and this claim alone is further insufficient to show that "the two technologies are significantly different." At the very least, both are drawn towards the handling of multicasting IP in a network composed of several LANs using SSM conversion of some type.

11. In the alternative, it is noted that both references are PGPubs of open applications, as opposed to issued patents. As such, it is likely that the current class/subclass designation may change upon issue and allowance.

12. In response to applicant's argument that there is no suggestion to combine the references (P. 11, Para. 1), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some

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teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it is a well-known desire to people of ordinary skill in the art to lower processing overhead. Since Bou-Diab shows a method of doing so, and since they are both strongly pertinent to the particular problem, the statement of motivation is valid.

13. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (P.p. 10-11), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

14. In response to applicant's argument that the combination is unlikely to work (P. 11, Para. 1), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). That said, it is possible to bodily incorporate references with the same class but different subclasses, and the applicant has provided no other reason to believe bodily incorporation would not be successful.

15. Applicant claims that no justification was given for dependent claims. The applicant disagrees, and points to the currently mapped claims as compared to the original rejection. The examiner has mapped the claims solely to provide the applicant with needed assistance.

16. In response to applicant's argument that Gainer is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, examiner is concerned by the allegation that examiner merely grabbed a "random disclosure utilizing MAC addresses (P. 11, Para.4)." In any case, Gainer is yet another 370-class method of handling SSM signals in an IP network, meant for multicasting to numerous nodes, and specifically meant to enhance existing network systems.

17. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Gainer teaches that prior art systems "are costly to implement and maintain." Thus, it is implicit that cost cutting is a goal for Gainer with regards to a Yoneda type system.

18. Therefore, the rejections are maintained for the reasons above. This action is final.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 1-5, 8-12, 15-19, and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda et al. (2007/0076703) in view of Bou-Diab et al. (2006/0187950).

21. For claim 1, 8, 15, and 22, Yoneda teaches a method and system (abstract) for providing request compatibility in a multicast system (Paras. 1-30 and 86-134), said method comprising:

- a. receiving, by a gateway coupled between a group of receivers and a router, requests for traffic (Paras. 33-38) from said group of receivers (Paras. 39-81);
- b. determining, by said gateway, whether said traffic requests contain incompatible request types (Paras. 31-32);
- c. if incompatible request types exist, then separating said traffic requests into at least two groups based on type (Paras. 39-81); and
- d. sending requests of different types to said router (Paras. 33-38) from distinct addresses (Paras. 82-85).

22. Yoneda does not expressly disclose that said gateway is a layer 2 switch. Bou-Diab teaches a method and system (abstract) of converging broadcast technologies (Paras. 1-39 and 71), wherein IGMP (Para. 61) messages are grouped (Paras. 40-48) by a layer-2 switch (Paras.

49-51). At the time the invention was made, one of ordinary skill in the art would have added Bou-Diab to Yoneda in order to lower processing requirements (Para. 24).

23. For claims 2, 9, 16, and 23, Yoneda teaches that said incompatible request types include a single-source request (SSM) and an any-source request (ASM) (Paras. 31-32).

24. For claims 3, 10, 17, and 24, Yoneda teaches that said single-source request (SSM) comprises an IGMP v3 request (Paras. 31-32).

25. For claims 4, 11, 18, and 25, Yoneda teaches that said older any-source request (ASM) comprises an IGMP v2 request (Paras. 31-32).

26. For claims 5, 12, 19, and 26, Yoneda teaches that said incompatible request types include an include request (SSM) and an exclude request (ASM) (Paras. 31-38).

27. Claims 6, 7, 13, 14, 20, 21, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda and Bou-Diab as applied to claims 1, 8, 15, 22, and 23 above, and further in view of Gainer et al. (2007/0121628).

28. For claims 6, 13, 20, and 27, Yoneda and Bou-Diab discloses sending requests based on the identity of the network (see claim 1 discussion above), but does not disclose that said act of sending requests of different types to said router from distinct addresses further comprises creating a first host identity located at a first MAC address, and creating a second host identity located a second MAC address. Gainer teaches a method and system (abstract) of mapping SSM identifiers (Paras. 1-21 and 80-81) that discloses the creation of host identities based on MAC addresses (Paras. 38-76). At the time the invention was made, one of ordinary skill in the art would have added Gainer in order to limit implementation costs (Para. 5).

29. For claims 7, 14, 21, and 28, Yoneda and Bou-Diab discloses sending requests based on the identity of the network (see claim 1 discussion above), but does not disclose that sending requests of a first type from said first host identity located at said a first MAC address, and sending requests of a second type from said second identity located at said second MAC address. Gainer teaches a method and system (abstract) of mapping SSM identifiers (Paras. 1-21 and 80-81) that discloses the sending of messages based on host identities further based on MAC addresses (Paras. 38-76). At the time the invention was made, one of ordinary skill in the art would have added Gainer in order to limit implementation costs (Para. 5).

Conclusion

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELVIN H. POLLACK whose telephone number is (571)272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. H. P./
Examiner, Art Unit 2145
13 February 2008

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145